STATUS OF THE CLAIMS

1-32. (canceled)

33. (currently amended) A method of decolonizing ~~skin pathogen~~bacterial populations comprising topically applying to a patient in need thereof at a bacterially infected site ~~requiring decolonization an effective amount of the~~ a topical composition ~~of claim 17~~ comprising lysostaphin and one or more lantibiotics.

34. (currently amended) The method of claim 33, wherein said topical composition comprises from about 0.10 to about 10.0 wt % of lysostaphin selected from the group consisting of wild-type lysostaphin, lysostaphin mutants, variants and fragments, synthetic lysostaphins and recombinant lysostaphins~~, and has proteolytic activity against pentaglycine-containing bridges in the cell wall peptidoglycan of staphylococci~~.

35. (previously presented) The method of claim 33, wherein said topical composition comprises from about 0.10 to about 10.0 wt % of one or more lantibiotics selected from the group consisting of nisin, subtilin, epidermin, gallidermin, cinnamycin, duramycin, ancovenin, and Pep 5.

36. (previously presented) The method of claim 35, wherein said topical composition comprises nisin and a surfactant, or a chelating agent or carvacrol.

37. (previously presented) The method of claim 36, wherein said chelating agent comprises EDTA.

38. (previously presented) The method of claim 35, wherein said topical composition comprises a recombinant nisin variant.

39. (currently amended) The method of claim [[35]]33, wherein said topical composition ~~further~~ comprises ~~lysostaphin~~a pharmaceutically acceptable carrier for

topical application.

40. (previously presented) The method of claim 33, wherein said topical composition further comprises at least one anti-infective active agent other than lysostaphin or a lantibiotic selected from the group consisting of beta-lactams, polymixin, glycopeptides, mutanolysin, lysozyme, cellozyl muramidase, antibacterial antibodies and antibacterial peptides.

41. (previously presented) The method of claim 33, wherein said topical composition further comprises at least one of bacitracin and neomycin.

42. (currently amended) The method of claim [[33]]39, wherein said pharmaceutically acceptable carrier for topical application is in the form of a spray, mist, aerosol, lotion, cream, aqueous or non-aqueous solution or liquid, oil, gel, ointment, paste, unguent, emulsion or suspension.

43. (currently amended) The method of claim 42, wherein said pharmaceutically acceptable carrier for topical application is an oil-in-water emulsion-based cream or lotion comprising an aqueous phase ~~comprising ethoxylated partial glycerides of fatty acids~~, an oil phase ~~comprising a hard fat~~, and an emulsifier ~~that is an inverse emulsion of a water-soluble polymer in an oil phase~~.

44. (previously presented) The method of claim 43, wherein said aqueous phase comprises a skin absorption promoter selected from the group consisting of DMSO and partial fatty acid glycerides.

45. (currently amended) The method of claim 33, wherein said topical composition is a cream formulation comprising: about 0.10 to about 10% by weight of lysostaphin, ~~and/or~~ about 0.10 to about 10% by weight one or more lantibiotics; about 2 to about 10% by weight of SOFTISAN 378; about 0.25 to about 3% by weight of SOFTIGEN 767; about 2 to about 8% by weight of SEIGEL 305 or SIMUGEL 600; 0 to about 10% by weight of

IMWITOR 308 and/or IMWITOR 742; and about 70 to about 90% by weight of water.

46. (previously presented) The method of claim 33, wherein said topical composition is coated on the surface of a topical applicator.

47-54. (canceled)

55. (new) The method of claim 33, wherein said bacterially infected site is selected from the group consisting of infected abrasions, infected skin cuts, infected surface cuts, infected burns, infected surgical incisions, and infected decubiti.

56. (new) The method of claim 33, wherein the concentration of lysostaphin in said composition is lower than the minimum inhibitory concentration of lysostaphin when used independently.

57. (new) The method of claim 33, wherein the concentration of said lantibiotic in said composition is lower than the minimum inhibitory concentration of said lantibiotic when used independently.

58. (new) The method of claim 57, wherein said lantibiotic is nisin.

59. (new) The method of claim 33, wherein the concentrations of lysostaphin and said lantibiotic present in said composition are lower than the minimum inhibitory concentrations of either lysostaphin or said lantibiotic when used independently.

60. (new) The method of claim 33, wherein said method decolonizes bacterial populations residing below the dermal layer.

61. (new) The method of claim 43, wherein said emulsifier is a water-soluble polymer in an oil phase.

62. (new) The method of claim 43, wherein said emulsifier is an inverse emulsion of polyacrylamide in liquid paraffin.

63. (new) The method of claim 43, wherein said oil phase comprises a hard fat.

64. (new) The method of claim 33, wherein said bacterial populations comprise skin pathogens.

65. (new) The method of claim 33, wherein said bacterial populations comprise *Staphylococcus aureus*.

66. (new) The method of claim 33, wherein said bacterial populations comprise *Pseudomonas aeruginosa*.

67. (new) The method of claim 33, wherein said topical composition comprises 0.1 % by weight lysostaphin and 0.1 % by weight nisin.

68. (new) The method of claim 33, wherein said composition is applied to said infected site of said patient once a day.

69 (new) The method of claim 33, wherein said composition is applied to said infected site of said patient two or more times a day.

70. (new) The method of claim 33, wherein said composition is applied to said infected site in one or more applications on a single day.

71. (new) The method of claim 33, wherein said composition is applied to said infected site on multiple days.

72. (new) The method of claim 33, wherein said method of decolonizing eradicates said bacterial populations at said infected sites.

73. (new) The method of claim 33, wherein said method of decolonizing reduces the number of bacterial colonies that can be grown from said infected site after application of said composition compared to the number of colonies that can be grown from said infected site prior to said application.

74. (new) The method of claim 33, wherein said method of decolonizing reduces by 30% to 100% the number of bacterial colonies that can be grown from said infected site after application of said composition compared to the number of colonies that can be grown from said infected site prior to said application.

75. (new) The method of claim 33, wherein said method blocks bacterial colonization at said infected site.